

CLAIMS

What is claimed is:

1. A balun transformer selective on a band centered on a first frequency, comprising, between a same common mode input/output terminal and respectively one of two differential mode input/output terminals:
a high-pass filter with a cut-off frequency smaller than said first frequency;
and
a band-pass filter with a central frequency greater than said first frequency.
2. The transformer of claim 1, wherein the two filters are connected by an inductive coupling.
3. The transformer of claim 1, wherein the high-pass filter is of the second order.
4. The transformer of claim 1, wherein the central frequency of the band-pass filter is smaller than 1.5 times said first frequency.
5. The transformer of claim 1, wherein the cut-off frequency of the high-pass filter is greater than 0.5 times the first frequency.
6. The transformer of claim 1, wherein the band-pass filter comprises, between an input terminal of the filter and one of said differential mode input/output terminals, a first inductance, a second inductance being in parallel with a first capacitor between said input/output terminal and the ground.

7. The transformer of claim 6, wherein the high-pass filter comprises:
a first capacitor having a first electrode connected to an input terminal of the filter and a second electrode connected, by a first inductance, to ground; and
a second capacitor having a first electrode connected to the junction point of the first capacitor and of the first inductance and having a second electrode connected to one of said differential mode input/output terminals and, by a second inductance, to ground.

8. The transformer of claim 7, wherein the first inductances of the band-pass and high-pass filters are coupled together and have a same value.

9. The transformer of claim 7, wherein the second inductances of the band-pass and high-pass filters are formed by a transmission line, the value of which conditions the central frequency of the band-pass filter.

10. The transformer of claim 9, wherein the value of the second inductance of the high-pass filter is a function of the cut-off frequency expected for this filter.

11. The transformer of claim 7, wherein the input terminal of the filters is common.